

**OY4 deliverables:**

<b>Date</b>	<b>Deliverable</b>
<b>WR 001</b>	<b>EFED Coding</b>
Weekly	Code papers following EFED Standard Operating Procedures. The rate of coding has been ~35 papers / week. Provide a summary of papers located for each chemical due in the following month including number of references found to be acceptable and coded; number excluded; number not received / processed prior to deadline, and any special considerations, specifically additional coding of plant or target species data.
As Needed	If the total number of potentially acceptable papers identified exceeds 200, or the estimated number of hours appears to exceed 200, complete a projected estimate of hours and report any issues related to delivery date changes at least one month prior to delivery date.
Monthly	Based on the schedule, provide all Procite files and Excel spreadsheet within one week of the delivery date to OPP lead staff and EPA TM. Note the number of papers not received by delivery date, and therefore not processed. Identify any new TODO items for discussion at technical exchange meetings.
Monthly	Following the schedule, provide assistance in preparing reports for EFED. On average there will be 4-5 chemicals per month. Current schedule is listed below.
May 15, 2013 Completed 5/15/2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Limonene
May 15, 2013 Completed 5/15/2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Flutolanil
May 17, 2013 Completed 5/20/2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Chlorpyrifos
June 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Hexazinone
June 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: DTEA
June 30, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Glyphosate
June 30, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Diazinon
July 1, 2013 Rescheduled to March 2014	Deliver all Procite files and Excel files for OPP substance with related chemicals: Ethoprop 5/13/2013: EFED Removed from OY4 schedule
July 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Chlorethoxyfos
July 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Maleic Hydrazide
July 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Maleic Hydrazide Potassium salt
August 1, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Pronamide/Propyzamide
August 1, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Malathion / Malaoxon
August 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Phosmet
August 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Piperalin
August 30, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Bromine Chloride
September 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Streptomycin sulfate
September 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Streptomycin
October 1, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Tebupirimphos
October 15, 2013	Deliver all Procite files and Excel files for OPP substance with related chemicals: Tebuthiuron

January 15, 2014	Deliver all Procite files and Excel files for OPP substance with related chemicals: Tetrachlorvinphos
<del>July 1, 2013</del> Revised: March 30, 2014	Deliver all Procite files and Excel files for OPP substance with related chemicals: Dimethoate 5/13/2013: EFED moved to March 30 2014 delivery date
May 1, 2014	Update SOPs related to coding of EFED studies. Provide PDF and Word versions of all SOPs.
As needed	Maintain EFED reporting software procedures. Provide information on bugs or technical problems related to creating the Excel outputs for OPP/EFED.
<b>WR 004</b>	<b>Existing database applications</b>
Monthly	Provide information on bugs or technical problems related to the supported application and/or website, data downloads problems etc. Identify any new TODO items for discussion at technical exchange meetings.
As needed, and May 7, 2014	Provide updated standard operating procedures and system documentation as required under EPA policies and procedures ( <a href="http://www.epa.gov/irmpoli8/">http://www.epa.gov/irmpoli8/</a> ). Provide PDF versions of all system documentation and SOPs.
	As prioritized and discussed in regular technical exchange meetings, address software issues identified as high priority by EPA.
June 15, 2013	Update EFED OPP database within Tox Module; Release to ECOTOX Website
<b>WR 005</b>	<b>Outreach</b>
September 30, 2013	Provide input to EPA on changes to the Outreach and Data Maintenance SOPs
Monthly and May 7, 2014	Send an Excel version of the outstanding and ongoing data maintenance activities. Identify any new TODO items for discussion at technical exchange meetings.
Monthly and May 7, 2014	Provide the SOP-TS report of outreach provided to clients. Provide list of suggested changes / improvements to ECOTOX website.
Monthly	Work on high priority tasks from the "Task List OY3.xlsx" file and user identified data maintenance issues. The <b>highest priorities for user support calls</b> are (a) errors in chemical information; (b) errors in duration or concentration units; and (c) Errors in species information. The <b>highest priorities for the "Task List OY3.xlsx"</b> are those related to (a) chemical information including grade, purity, analytical method, concentration type (b) duration and/or concentration and units; (c) species information; (d) Presentation of endpoint data.
As needed	Complete prioritized data maintenance in support of quarterly database updates.
As needed	Complete prioritized data maintenance in support of UNIFY data transfers
<b>WR 006</b>	<b>Literature acquisition for ECOTOX</b>
Monthly	Send the requestor the status of ECOTOX manual, CSA, ProQuest, and STN literature searches, skimming of review articles, and OY2 deliverables. Identify any new TODO items for discussion at technical exchange meetings.
Monthly	Following SOPs, submit copy/PDF requests to EPA for studies found potentially applicable during skimming of literature searches. Send 100 citations or less each month for processing via copy request; and another 25 per month for author ordering. Priorities are studies related to current ECOTOX search and coding effort/deliverables.
Monthly	Following SOPs, submit ILL requests to EPA for studies found potentially applicable during skimming of literature searches. Send 100 citations or less each month for processing via ILL request. Priorities are studies related to current ECOTOX search and coding effort/deliverables.
Monthly	Provide most recent Ref Mgr files for use onsite at EPA

Monthly	Complete skimming of 5 LITBIBs per month. Process all citations within 2 months after Skimming. Priorities are LITBIBs associated with PPCP and pesticides.
Monthly	Complete skimming of 1000 papers per month and track progress on monthly reports breaking out number found applicable, non-applicable and number of papers outstanding (to be skimmed). Track by project (ECOTOX, EFED) .
Monthly	Based on WR 001 EFED schedule conduct literature searches (highlighted in green below. In monthly reports provide a summary for each chemical delivered including (a) total number of citations identified in the search, (b) number of papers identified as potentially applicable, (c) number of papers applicable to ECOTOX but not applicable to EFED coding effort, (d) number of papers found acceptable and coded for EFED, (e) number rejected for both EFED and ECOTOX. Also note any papers found to be acceptable for EFED, but not coded due to time constraints. Identify any new TODO items for discussion at technical exchange meetings
May 15, 2013 COMPLETED	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Hexazinone
May 15, 2013 COMPLETED	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: DTEA
May 30, 2013	Provide summary memo, for quarterly library search (manual search) November 2012; complete all steps in the literature identification and quality assurance process (Average OY2: N=2300) 4/29/2013: 1524 to ID ; complete ID (40 hrs), QA (20 hrs), transfer to UNIFY (20 hrs) = total 80 hr
May 30, 2013	Provide summary memo, for quarterly library search (manual search) February 2013; complete all steps in the literature identification and quality assurance process (Average OY2: N=2300) 4/29/2013: ID completed; QA (20 hrs) and transfer to UNIFY (20 hrs) = total 40 hrs
May 30, 2013	Complete all steps in Jan Feb Mar 2013 CSA / STN / ProQuest literature identification and quality assurance process (Average OY3: N=1500)
May 30, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Glyphosate
May 30, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Diazinon
June 1, 2013 Removed from OY4	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Ethoprop
June 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Chlorethoxyfos
June 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Maleic Hydrazide
June 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Maleic Hydrazide Potassium salt
June 30, 2013	Complete identification all potentially relevant citations from drug/personal care product searches related to Morphine (N=8651). Place INPROCESS papers in the queue for acquisition.
July 1, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Pronamide/Propyzamide
July 1, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Malathion / Malaoxon
July 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Phosmet
July 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Piperalin

July 30, 2013	Provide summary memo, for quarterly library search (manual search) May 2013; complete all steps in the literature identification and quality assurance process (Average OY3: N=2300)
July 30, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Bromine Chloride
August 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Streptomycin sulfate
August 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Streptomycin
August 30, 2013	Complete all steps in Apr May Jun 2013 CSA / STN/ ProQuest literature identification and quality assurance process (Average OY3: N=1500)
September 1, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Tebupirimphos
September 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Tebuthiuron
September 30, 2013	Conduct Literature Search for Office of Water, including file preparation and identification of aquatic vs. terrestrial. – CHEMICAL UNKNOWN
October 30, 2013	Provide summary memo, for quarterly library search (manual search) August 2013; complete all steps in the literature identification and quality assurance process (Average OY3: N=2300)
October 30, 2013	Conduct Literature Search for Office of Water, including file preparation and identification of aquatic vs. terrestrial. – CHEMICAL UNKNOWN
November 30, 2013	Complete all steps in Jul Aug Sept 2013 CSA / STN / ProQuest literature identification and quality assurance process (Average OY3: N=1500)
December 15, 2013	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Tetrachlorvinphos
December 30, 2013	Conduct Literature Search for Office of Water, including file preparation and identification of aquatic vs. terrestrial. – CHEMICAL UNKNOWN
January 30, 2014	Provide summary memo, for quarterly library search (manual search) November 2013; complete all steps in the literature identification and quality assurance process (Average OY3: N=2300)
February 28, 2014	Complete all steps in Oct Nov Dec 2013 CSA / STN/ ProQuest literature identification and quality assurance process (Average OY3: N=1500)
<del>June 1, 2013</del> Revised Feb 28, 2014	Deliver library order, photocopy, author order, and commercial ordering files for EFED chemical: Dimethoate
April 30, 2014	Provide summary memo, for quarterly library search (manual search) February 2014; complete all steps in the literature identification and quality assurance process (Average OY3: N=2300)
May 1, 2014	Update SOPs as they relate to EFED and ECOTOX literature search and acquisition procedures. Provide Word and PDF versions of final documents.
If time available	Complete identification and citation processing of previous OW searches for Acrolein (N=197), Carbaryl (N=197), Chlorpyrifos (N=473), Molybdenum (N=430), and TRV Searches for Barium (N=832), Beryllium (N=155), Chromium (N=266), Cobalt (N=307), DDT (N=704), Dieldrin (N=416), and Selenium (N=265) – [Total citations = 4242]
If time available	Complete identification and citation processing of previous OW searches for Aluminum (N=1887), and Boric Acid (N=2917) – [Total citations = 4804]
If time available	Complete identification and citation processing of previous Lead searches for OW (N=4819) and TRV (N=874) – [Total citations = 5976]
If time available	Complete identification and citation processing of previous Cadmium searches for OW (N=5102) and TRV (N=874) – [Total citations = 5976]

If time available	Complete identification and citation processing for Antimony (N=45) and Zinc (N=11,687) searches conducted for TRV
If time available	Complete identification and citation processing of previous PCP (N=1054) and Silver (N=1357) searches for TRV and Endosulfan for OW (N=1988) – [Total citations = 4399]
If time available	Complete identification and citation processing of previous Nickel searches for OW (N=1657) and TRV (N=1067) – [Total citations = 3398]
If time available	Complete identification and citation processing of previous TRV searches for Iron (N=2331) and Manganese (N=3218) – [Total citations = 5549]
If time available	Complete identification and citation processing of previous Arsenic searches for OW (N=1023 and TRV (N=1357) – [Total citations = 2380]
<b>WR 007</b>	<b>Update of data to EPA Public and Intranet websites</b>
June 15, 2013	Release newly coded and updated data to ECOTOX searchable public database ( <a href="http://www.epa.gov/ecotox">www.epa.gov/ecotox</a> ), and update help, relevant documentation files, and the recent additions page following ECOTOX SOPs. All newly posted documentation and recent addition links must be approved by EPA prior to release on the public website. Within 2 weeks of ECOTOX update, refresh ECOTOX data linked to ASTER ( <a href="http://q2626xmnay001.aa.ad.epa.gov/aster/">http://q2626xmnay001.aa.ad.epa.gov/aster/</a> ), and add new data download files to the website: <a href="http://cfpub.epa.gov/ecotox/data_download.cfm">http://cfpub.epa.gov/ecotox/data_download.cfm</a>
September 15, 2013	Release newly coded and updated data to ECOTOX searchable public database ( <a href="http://www.epa.gov/ecotox">www.epa.gov/ecotox</a> ), and update help, relevant documentation files, and the recent additions page following ECOTOX SOPs. All newly posted documentation and recent addition links must be approved by EPA prior to release on the public website. Within 2 weeks of ECOTOX update, refresh ECOTOX data linked to ASTER ( <a href="http://q2626xmnay001.aa.ad.epa.gov/aster/">http://q2626xmnay001.aa.ad.epa.gov/aster/</a> ), and add new data download files to the website: <a href="http://cfpub.epa.gov/ecotox/data_download.cfm">http://cfpub.epa.gov/ecotox/data_download.cfm</a>
December 15, 2013	Release newly coded and updated data to ECOTOX searchable public database ( <a href="http://www.epa.gov/ecotox">www.epa.gov/ecotox</a> ), and update help, relevant documentation files, and the recent additions page following ECOTOX SOPs. All newly posted documentation and recent addition links must be approved by EPA prior to release on the public website. Within 2 weeks of ECOTOX update, refresh ECOTOX data linked to ASTER ( <a href="http://q2626xmnay001.aa.ad.epa.gov/aster/">http://q2626xmnay001.aa.ad.epa.gov/aster/</a> ), and add new data download files to the website: <a href="http://cfpub.epa.gov/ecotox/data_download.cfm">http://cfpub.epa.gov/ecotox/data_download.cfm</a>
March 15, 2014	Release newly coded and updated data to ECOTOX searchable public database ( <a href="http://www.epa.gov/ecotox">www.epa.gov/ecotox</a> ), and update help, relevant documentation files, and the recent additions page following ECOTOX SOPs. All newly posted documentation and recent addition links must be approved by EPA prior to release on the public website. Within 2 weeks of ECOTOX update, refresh ECOTOX data linked to ASTER ( <a href="http://q2626xmnay001.aa.ad.epa.gov/aster/">http://q2626xmnay001.aa.ad.epa.gov/aster/</a> ), and add new data download files to the website: <a href="http://cfpub.epa.gov/ecotox/data_download.cfm">http://cfpub.epa.gov/ecotox/data_download.cfm</a>
As needed and May 7, 2014	Update SOPs related to the uploading data to the public access and ASTER intranet websites. Provide in PDF format.
<b>WR 009</b>	<b>ECOTOX Data Abstraction: For this task papers should be UR for the chemical, taxa, and/or endpoints specified; meet ECOTOX Acceptability Criteria and have data for WILD species, unless otherwise noted. Overall monthly coding rate should be 40-50 papers/month. Also, papers that are NO or blank in the acceptability criteria that meet the other requirements should be pulled from the files and SKIMMED using UNIFY module to ensure that all potential candidates are identified.</b>
Monthly	For deliverables noted below, provide status of coding efforts including the date, number of papers evaluated, coding completed using full ECOTOX procedures; coding completed for LiteEval, number un-reviewed; Number excluded. Identify any new TODO items for discussion at technical exchange meetings.



June 15, 2013	Code papers associated with Explosives (HMX, RDX, TNT, and CL-20). N~40
June 30, 2013	Code priority PPCP chemical papers that provide comparative toxicity data across species / taxa / life stages (N~14)
July 30, 2013	Code papers (aquatic and terrestrial) for the compounds: Entacapone, Ranitidine, Venlafaxine, Celecoxib, Doxorubicin, Spironolactone, Diphenhydramine, and Ampicillin (N~11 papers) – and terrestrial papers for Sertraline, Ibuprofen, Sulfamethoxazole, Diclofenac, Carbamazepine, and Fluoxetine (N~23 papers). These PPCP chemical have limited data in ECOTOX.
August 30, 2013	For Conazoles (see list below) code all papers having data for Birds, Fish, and Herps (N=34)
September 15, 2013	Code papers with data on aquatic species exposed to Major Ions (Na, K, Mg, Ca, Cl, SO <sub>4</sub> ; NaCl, KCl, CaCl <sub>2</sub> , MgCl <sub>2</sub> , Na <sub>2</sub> SO <sub>4</sub> , K <sub>2</sub> SO <sub>4</sub> , CaSO <sub>4</sub> , MgSO <sub>4</sub> , NaHCO <sub>3</sub> , KHCO <sub>3</sub> , CaCO <sub>3</sub> , MgCO <sub>3</sub> , Na <sub>2</sub> CO <sub>3</sub> , K <sub>2</sub> CO <sub>3</sub> , Ca(HCO <sub>3</sub> ) <sub>2</sub> , and Mg(HCO <sub>3</sub> ) <sub>2</sub> ). (N=179)
September 15, 2013	Code papers associated with PPCP literature search conducted under OY2. Focus should be on papers dealing with wild species, having an ECOTOX Acceptance Criteria of OK (SKIM those that without Acceptance Criteria), for conazoles only Non-target species, and working from current publication years backwards. Code at a rate of 30-50 papers / month. N ~338 papers. Along with the priorities listed above; these priorities should be put into place: <ul style="list-style-type: none"> <li>a. Do not (unless further instructed) code papers associated with Field exposures (i.e., laboratory studies only</li> <li>b. Do not (unless further instructed) code additional papers for Ethinyl estradiol and/or Tetracycline</li> </ul>
December 30, 2013	Update SOP for Chemical Verification and Use of Chemical module within UNIFY. Provide PDF and Word versions of all SOPs.
December 30, 2013	Update SOP for Species Verification and Use of Species module within UNIFY. Provide PDF and Word versions of all SOPs.
July 30, 2013	Code priority PPCP chemical papers with chronic data reported. N~14
Monthly	Excluding papers encompassed in deliverables discussed above (any tagged as EFED (not just those listed under WR 001); PPCP priority list; explosives; and major ions), code 30-50/month from recent literature (publication years 2009-2013). Only code papers dealing with wild species (Excluding FUNGI), having an ECOTOX Acceptance Criteria of OK (papers without OK or NO entered in SKIM should be skimmed for acceptability), and one of the following criteria: <ul style="list-style-type: none"> <li>a. Aquatic papers tagged as having data for NANO chemicals (N~49)</li> <li>b. Studies on effects of <u>Neonicotinoids</u> to BEES (n~18): ({neonicotin} OR {Nithiazine} OR {Acetamiprid} OR {Clothianidin} OR {Dinotefuran} OR {Imidacloprid} OR {Nitenpyram} OR {Thiacloprid} OR {Thiamethoxam} OR {Paichongding} OR {Imidaclothiz})</li> <li>c. Papers on Bisphenol A, PFOS or PFOA compounds (N~16)</li> <li>d. Papers tagged as PPCP (N~46)</li> <li>e. For other chemical, priority is most recent literature (2013/2014) to 2009 and aquatic plants; Birds, Bees, Fish, herp, insect, invert, and wild mammals. (N~600)</li> </ul>
As needed and May 7, 2014	Update coding SOPs related to the ECOTOX and LiteEval coding within UNIFY modules.

## List of Conazoles:

Albaconazole	Flusilazole	fumerate
Azaconazole	Flutriafol	Penconazole
Bifonazole	Fosfluconazole	Posaconazole
Bromuconazole	Furconazole	Prochloraz
Butoconazole	Furconazole	Propiconazole
Climbazole	Hexaconazole	Prothioconazole
Clomidazole	Imazalil	Quinconazole
Clotrimazole	Imazalil nitrate	S-3307
Conazole	Imibenconazole	Sertaconazole
Croconazole	Ipconazole	Simeconazole
Cyproconazole	Isoconazole	Sulconazole
Cyproconazole	Isovuconazole	Tebuconazole
Difenoconazole	Itraconazole	Terconazole
Diniconazole	Ketoconazole	Tetraconazole
Diniconazole	Metconazole	Tioconazole
Econazole	Miconazole	Triadimefon
Epoxiconazole	Myclobutanil	Triadimenol
Etaconazole	Neticonazole	Triflumizole
Fenbuconazole	Omoconazole	Triticonazole
Fenticonazole	Oxiconazole	Uniconazole
Fluconazole	Oxpoconazole	Voriconazole
Fluquinconazole	Oxpoconazole	